HW #55 Exponent Rules

Geometry

Due Date: Tuesday, January 7th, 2014

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

Watch the following video and answer the following questions

<http://tinyurl.com/GEOMCP55> & <http://tinyurl.com/GEOMCP55A>

For all of the following rules do the following: 1) Describe the process and 2) Provide an example

1. PRODUCT RULE:
2. POWER RULE:

Complete the following problems:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1) | 2) | 3) | | 4) |
| 5) | 6) *Review:* If a rectangle measures 42 meters by 56 meters, what is the length, in meters, of the diagonal of the rectangle? | | 7) What is the slope-intercept form of -3x – y + 7 = 0? | |

*Remember that you can always use old notes, a dictionary, math textbook, and/or look up topics online!*

|  |
| --- |
| 1. *In the past, you have used FOIL or box method to simplify the expression below.* |
|  |
| *Now do the opposite! Take the simplified expression and turn it into its factors (binomials)! If you forget how, use this video:* [**http://tinyurl.com/GEOMCP55B**](http://tinyurl.com/GEOMCP55B) |
| 1. Factor the following quadratic: x2 – 15x + 56. |
| 1. Little tougher: Now factor 2x2 + x – 6. |
| 1. Little tougher still: Factor 3x2 + 15x – 42. |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW#56: Exponent Rules Day 2

Geometry

Due Date: Wednesday, January 8th, 2014

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

Watch the following videos and answer the following questions

<http://tinyurl.com/GEOMCP55> & <http://tinyurl.com/GEOMCP55A>

1. QUOTIENT RULE:
2. NEGATIVE EXPONENT RULE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1) | | 2) | | 3) |
| 4) | 5) | | 6) *Review:* | |

You should approach each problem as an exploration. Problem-solving requires persistence as much as it requires ingenuity. When you get stuck, or solve a problem incorrectly, back up and start over. Keep in mind that you’re probably not the only one who is stuck, and that may even include your teacher. **If you have taken the time to think about a problem, you should bring to class a written record of your efforts, not just a blank space in your notebook**. The methods that you use to solve a problem, the corrections that you make in your approach, the means by which you test the validity of your solutions, and your ability to communicate ideas are just as important as getting the correct answer.

Solve all of the problems in your ***graph paper notebook neatly labeled!*** If you are stuck and cannot answer a question, write at least three complete sentences about the problem and what you do know. Use at least one of the sentence starters below:

1. Even though I am stuck, I do know…and I think I should…because…
2. I am stuck because I do not know what \_\_\_\_\_ means. I think it means…so I tried…
3. I got this answer but I think it is wrong because…

*Remember that you can always use old notes, a dictionary, math textbook, and/or look up topics online!*

|  |
| --- |
| 1) Salt is important in several superstitions including the one that says you should sprinkle salt on your doorstep to keep out evil spirits. The United States sold 25.03 million tons of salt in 2008, a decrease of 8.07 million tons from 1996. How many tons of salt did the United States sell in 1996? |
| 2) |

HW#57: **FINAL REVIEW!**

Geometry

Due Date: Monday, January 13th, 2014

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| 1) Define the following in three separate complete sentences: a) point, b) line, c) plane  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| 2) Find KM. | | 3) Find MF. |
| Use the description of a number line below to answer questions 4 – 5.  On a number line, point W is located at 3, X is located at –5, Y is located at –16, and Z is located at 11. | | |
| 4) What is the distance, in coordinate units, between points W and Z? | 5) What is the distance, in coordinate units, between points W and Z? | |
| 6) Write the midpoint formula: | 7) Write the distance formula: | |
| 8) Find the coordinates of the midpoint of the segment with the given endpoints.   1. R(3, 1) and S(3, 7) 2. V(2, 4) and W(6, 6) | 9) Find the distance of the segments with the given endpoints. Leave your answers in reduced radical form.   1. A(-6, 4) and B(0, 7) 2. X(-1, 8) and Y(6, 1) | |
| 10) Find the values of x that satisfy the following equation: | 11) Find the solution set of 2|6m + 5| - 1 = 25   1. Find the distance between the two values for m. 2. Find the sum of the two values for m. | |
| 12) Name the acute angles in the given figure: | 13) Which of the following is vertical to? | |
| 14) Use the following together in a complete sentence: a) bisecting line, b) angle, c) congruent  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 15) Make a statement using RSP, PST, and RST that demonstrates the angle addition postulate. | |
| 16) BD bisects ∠ABC. Find m∠ABC. | 17) Given m∠ADC = 135°, find m∠BDC. | |
| 18) BD bisects ∠ABC. Find m∠ABC. | 19) Given m∠QST = 135°, find m∠QSR. | |
| 20) List all the pairs of congruent angles if lines a and b are cut by transversal c. | 21) In the figure below, lines l and m are parallel. Which of the following angles does not have a measure of 68o?  5  1  2  4  3  *l*  Find the value of x in the figure below    A. 15  B. 23  C.  D.  E.  *m*  68o   1. 1 2. 2 3. 3 4. 4 5. 5 | |
| 22) In the figure below lines a and b are parallel, and  1 = 47. Find the measure of 11.     1. 43 2. 47 3. 133 4. 313 5. Cannot be concluded from given information | 23) Which statement is true of the given lines?  Line A: -3x + y = 5    Line B: x + 3y = 2  Line C: 2x + 3y = 5  A) Lines a and b are parallel  B) Lines a and b are perpendicular  C) Lines a and c are parallel  D) Lines a and c are perpendicular  E) Lines b and c are perpendicular | |
| 24) Which graph represents the equation given? | 25) Write the slope equation. | |
| 26) What is the slope of the line that passes through the points (4, 5) and (-3, 0)? | |
| 27) What is the equation of the line that passes through the points (-2, -1) and (3, 6)? | |
| 28) What is the equation of the line that passes through the points (0, -4) and (-2, 1)? | 29) What is the equation of the line that is parallel to y = 2x + 4 and passes through the point (0, -1)? | |
| 30) Fill in the following formulas.  Perimeter Area   |  |  |  | | --- | --- | --- | | Triangle |  |  | | Square |  |  | | Rectangle |  |  | | Circle |  |  | | | |
| 31) Find the perimeter and area of the triangle below. | | 32) Find the perimeter and area of the floor plan below. |
| 33) What is the circumference of the circle? | | 34) What is the length of the radius of a circle with an area of 196? |
| 35) What the sum of the interior angles of a triangle? | | 36) What is the sum of the interior angles of a quadrilateral? |
| 37) Find the measure of angle A. | | 38) What is the measure of angle W in the figure below? |